



MEAN WELL LPHC-18  
Series 18W Single  
Output Switching  
Power Supply



# MEAN WELL LPHC-18 Series 18W Single Output Switching Power Supply User Guide

[Home](#) » [MEAN WELL](#) » MEAN WELL LPHC-18 Series 18W Single Output Switching Power Supply User Guide

## Contents

- [1 MEAN WELL LPHC-18 Series 18W Single Output Switching Power Supply](#)
- [2 Product Usage Instructions](#)
- [3 Features](#)
- [4 SPECIFICATION](#)
- [5 Recommend Mounting Direction](#)
- [6 Block Diagram](#)
- [7 Documents / Resources](#)
  - [7.1 References](#)
- [8 Related Posts](#)



## MEAN WELL LPHC-18 Series 18W Single Output Switching Power Supply



## Specifications

- Model: LPHC-18-350, LPHC-18-700
- Output:
  - Rated Current: 350mA, 700mA
  - DC Voltage Range: 6~48V
  - Rated Power: 16.8W, 17.5W
  - Ripple & Noise (max.): 300mVp-p, 250mVp-p
- Input:
  - Voltage Range: 180 ~ 264VAC
  - Frequency Range: 47 ~ 63Hz
  - Efficiency (Typ.): 80%
- Working Temperature: -30~ +70
- Safety Standards: BIS IS15885, EAC TP TC 004, IP67, LVD BS EN/EN62368-1
- Dimension: 140\*30\*22 mm (L\*W\*H)

## Product Usage Instructions

### Installation

1. Ensure the input voltage is within the specified range of 180 ~ 264VAC.
2. Connect the AC/N (Blue) and AC/L (Brown) wires for power input.
3. Connect the -V (Black) and +V (Red) wires for DC output.
4. Mount the power supply in the recommended direction as shown in the block diagram.

### Operation

1. After installation, power on the supply and ensure it is functioning properly.
2. Monitor the output current and voltage to ensure they meet your requirements.
3. Observe the working temperature to prevent overheating.

### Maintenance

1. Regularly check for any abnormalities in output current or voltage.
2. Clean the power supply unit periodically to prevent dust accumulation.

### FAQ

**Q: What is the maximum number of power supplies that can be connected on a 16A circuit breaker?**

A: The maximum number of units is 13 for a circuit breaker of type B and 22 for a circuit breaker of type C at 230VAC.

## 18W Single Output Switching Power Supply

### GTIN CODE

MW Search: <https://www.meanwell.com/serviceGTIN.aspx>

## Features

- Constant current mode power supply
- 180-264VAC input only
- Fully encapsulated with IP67 level (Note.6)
- Protections:Short circuit / Over voltage / Over temperature
- Cooling by free air convection
- Class 11 power unit, no FG
- Pass LPS
- 100% full load burn-in test
- Suitable for LED related fixture or appliance (such as LED Decoration or Advertisement devices)
- High reliability / Low cost
- 2 years warranty

## SPECIFICATION

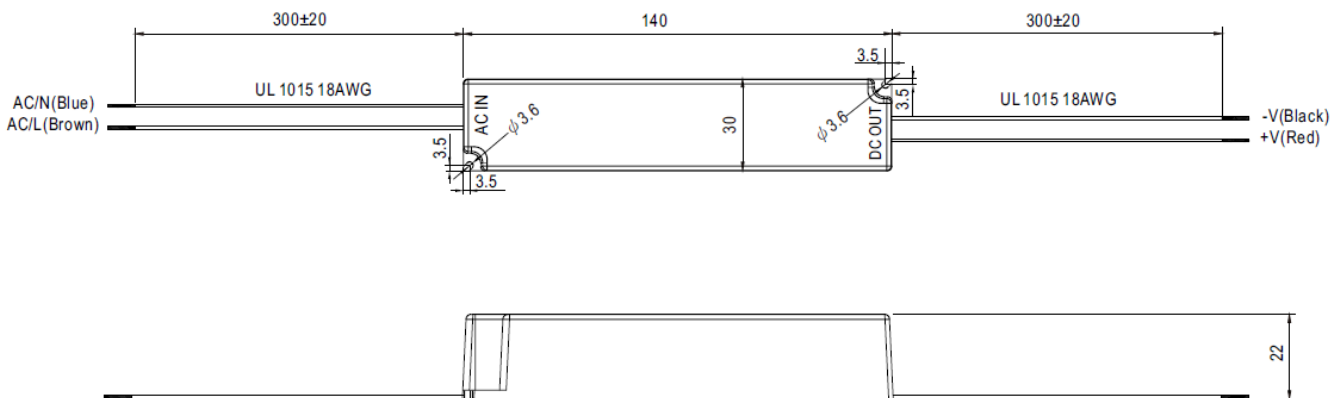
MODEL		LPHC-18-350	LPHC-18-700
OUTP UT	RATED CURRENT	350mA	700mA
	DC VOLTAGE RANGE	6~48V	6~25V
	RATED POWER	16.8W	17.5W
	RIPPLE & NOISE (max.) Note.2	300mVp-p	250mVp-p
	VOLTAGE TOLERANCE Note.3	±5.0%	
	CURRENT ACCURACY	±8.0%	
	LINE REGULATION	±1.0%	
	LOAD REGULATION	±3.0%	
	SETUP, RISE TIME	3600ms, 100ms / 230VAC	
	HOLD UP TIME (Typ.)	20ms/230VAC at full load	
INPU T	VOLTAGE RANGE	180 ~ 264VAC      254 ~ 370VDC	
	FREQUENCY RANGE	47 ~ 63Hz	
	EFFICIENCY(Typ.)	80%	80%
	AC CURRENT	0.3A/230VAC	

	<b>INRUSH CURRENT(Typ.)</b>	COLD START 50A(twidth=190µs measured at 50% Ipeak) at 230VAC	
	<b>MAX. No. of PSUs on 16A CIRCUIT BREAKER</b>	13 units (circuit breaker of type B) / 22 units (circuit breaker of type C) at 230VAC	
	<b>LEAKAGE CURRENT</b>	0.25mA / 240VAC	
<b>PROTECTION</b>	<b>OVER VOLTAGE</b>	50.4~ 60V	28.75~ 33.75V
		Protection type : Shut off o/p voltage, clamping by zener diode	
	<b>OVER TEMPERATURE</b>	Tj 170°C typically (U1) Detect on main control IC	
		Protection type : Hiccup mode, recovers automatically after temperature goes down	
<b>ENVIRONMENT</b>	<b>WORKING TEMP.</b>	-30~ +70°C (Refer to “Derating Curve”)	
	<b>WORKING HUMIDITY</b>	20 ~ 90% RH non-condensing	
	<b>STORAGE TEMP., HUMIDITY</b>	-40 ~ +80°C, 10 ~ 95% RH	
	<b>TEMP. COEFFICIENT</b>	±0.2%/°C (0 ~ 50°C)	
	<b>VIBRATION</b>	10 ~ 500Hz, 2G 10min./1cycle, period for 60min. each along X, Y, Z axes	
<b>SAFETY &amp; EMC (Note 5)</b>	<b>SAFETY STANDARDS</b>	BIS IS15885, EAC TP TC 004, IP67,LVD BS EN/EN62368-1 approved; design refer to UL1310 Class 2, CAN/CSA C22.2 No. 223-M91	
	<b>WITHSTAND VOLTAGE</b>	I/P-O/P:3KVAC	
	<b>ISOLATION RESISTANCE</b>	I/P-O/P:>100M Ohms / 500VDC / 25°C/ 70% RH	
	<b>EMC EMISSION</b>	Compliance to BS EN/EN55032 (CISPR32) Class A, BS EN/EN61000-3-2 Class A, BS EN/EN61000-3-3, EAC TP TC 020	
	<b>EMC IMMUNITY</b>	Compliance to BS EN/EN61000-4-2,3,4,5,6,8,11, BS EN/EN55035, light industry level, EAC TP TC 020	
<b>OTHERS</b>	<b>MTBF</b>	7399.9K hrs min. Telcordia SR-332 (Bellcore) ; 1086.9Khrs min. MIL-HDB K-217F (25°C)	
	<b>DIMENSION</b>	140*30*22(L*W*H)	
	<b>PACKING</b>	0.175Kg; 70pcs/13.3Kgs/0.71CUFT	

## NOTE

1. All parameters NOT specially mentioned are measured at 230VAC input, rated load and 25°C of ambient temperature.
  2. Ripple & noise are measured at 20MHz of bandwidth by using a 12" twisted pair-wire terminated with a 0.1uf & 47uf parallel capacitor.
  3. Tolerance : includes set up tolerance, line regulation and load regulation.
  4. Derating may be needed under low input voltage. Please check the static characteristic for more details.
  5. The power supply is considered as a component that will be operated in combination with final equipment. Since EMC performance will be affected by the complete installation, the final equipment manufacturers must re-qualify EMC Directive on the complete installation again.  
(as available [https://www.meanwell.com//Upload/PDF/EMI\\_statement\\_en.pdf](https://www.meanwell.com//Upload/PDF/EMI_statement_en.pdf) )
  6. Suitable for indoor use or outdoor use without direct sunlight exposure.
  7. This product is not intended for LED applications in the EU.(In the EU NPF/LPF/XLG series are recommended.)
  8. To fulfill the requirements of the latest ErP regulation for lighting luminaires, this LED Driver can only be used behind a switch without permanently connected to mains.
- ※ Product Liability Disclaimer For detailed information, please refer to <https://www.meanwell.com/serviceDisclaimer.aspx>

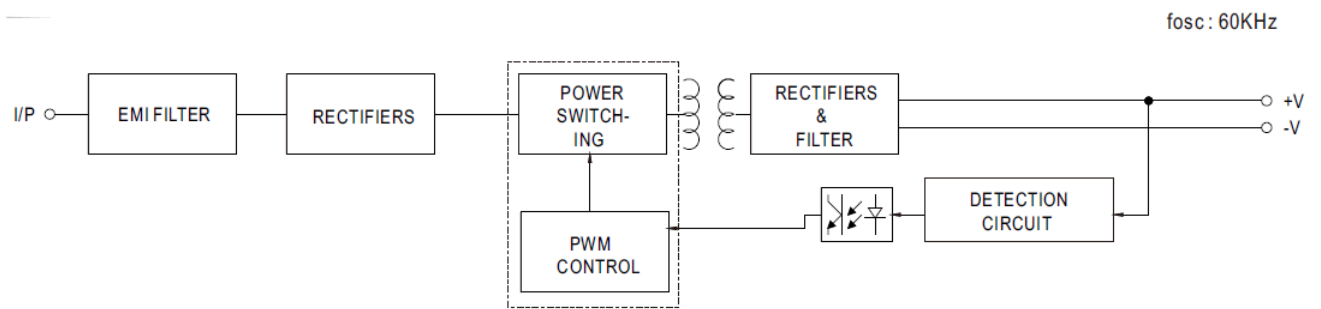
## Mechanical Specification



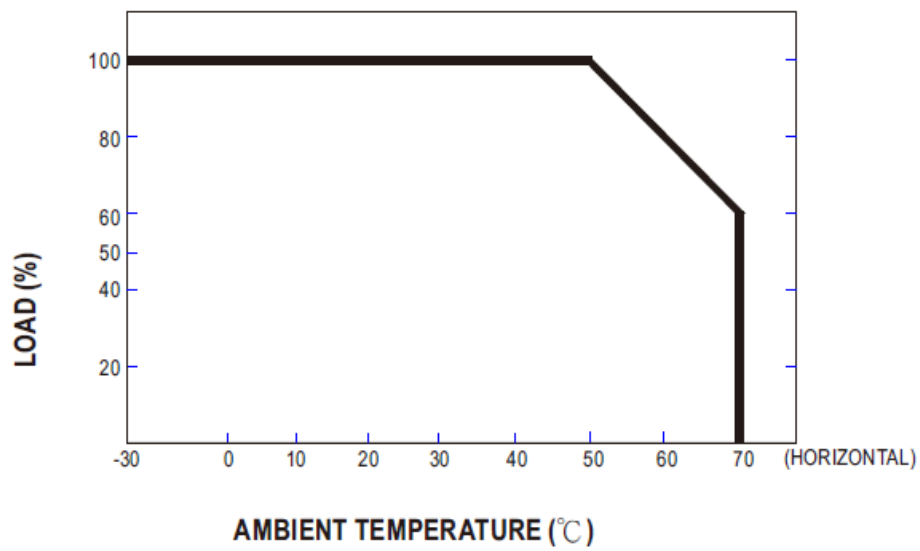
## Recommend Mounting Direction



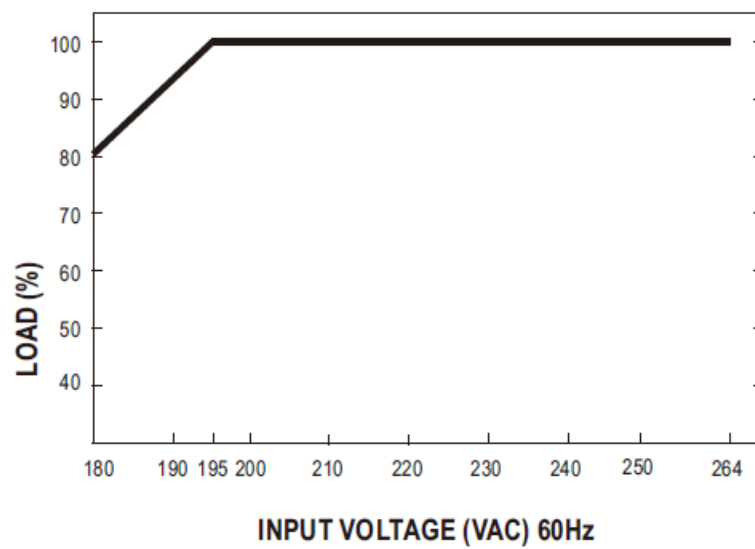
## Block Diagram



## Derating Curve



## Static Characteristics



## Documents / Resources



[MEAN WELL LPHC-18 Series 18W Single Output Switching Power Supply](#) [pdf] User Guide LPHC-18 Series 18W Single Output Switching Power Supply, LPHC-18 Series, 18W Single Output Switching Power Supply, Output Switching Power Supply, Switching Power Supply, Power Supply, Supply

References

- [User Manual](#)

[Manuals+](#), [Privacy Policy](#)

This website is an independent publication and is neither affiliated with nor endorsed by any of the trademark owners. The "Bluetooth®" word mark and logos are registered trademarks owned by Bluetooth SIG, Inc. The "Wi-Fi®" word mark and logos are registered trademarks owned by the Wi-Fi Alliance. Any use of these marks on this website does not imply any affiliation with or endorsement.